

In the Specification:

Please amend paragraph [0002] of the specification as follows:

[0002] This application is related to the following co-pending and commonly assigned patent applications: Serial No. ~~XX/XXXXXX~~ 10/651,120, filed August 28, 2003, entitled “System and Method for Detecting Direct Sequence Spread Spectrum Signals Using Pipelined Vector Processing”; Serial No. ~~XX/XXXXXX~~ 10/651,282, filed August 28, 2003, entitled “System and Method for Detecting Multiple Direct Sequence Spread Spectrum Signals Using a Multi-Mode Searcher”; Serial No. 10/439,400, filed May 16, 2003, entitled “System and Method for Intelligent Processing of Results from Search of Direct Sequence Spread Spectrum (DSSS) Signals”; Serial No. ~~XX/XXXXXX~~ 10/659,905, filed ~~August 23, 2003~~ September 11, 2003, entitled “System and Method for Detecting Direct Sequence Spread Spectrum Signals Using Batch Processing of Independent Parameters”, which applications are hereby incorporated herein by reference.

Please amend paragraph [0042] of the specification as follows:

[0042] With reference now to FIG. 5, there is shown a diagram illustrating a received sequence 505 and several hypotheses 510 and 520 in their symbol format, wherein the misalignment of a hypothesis to the received sequence is illustrated. As displayed in FIG. 5, the received sequence 505 is displayed as it is received, i.e., in groups of $N+1$ chips. For the hypotheses 510 and 520, several groups of $K+1$ chips are displayed. For the hypotheses 510 and 520, the groups of $K+1$ chips are displayed as they are generated by a sequence generator (not shown). However, due to differences in their PN offsets, the actual start (and finish) of symbols within the hypotheses 510 and 520 differ. For example, the hypothesis 510 has a PN offset so

that the symbols are aligned with the groups of K+1 chips, as indicated by the alignment of a symbol duration interval 515 with the K+1 chips representing the hypothesis 510. ~~while~~ On the other hand, the hypothesis 520 has a PN offset so that the symbols are misaligned with the groups of K+1 chips. This misalignment is displayed with a symbol duration interval 525 being slightly shifted to the right of the groups of K+1 chips representing the hypothesis 520.

Please amend paragraph [0047] of the specification as follows:

[0047] With reference now to Figure 6, there is shown a diagram illustrating a received sequence 605 and several hypotheses 610 and 620, wherein the correlation of the received sequence 605 with the hypotheses 610 and 620 is performed differently to ensure symbol alignment may be maintained, according to a preferred embodiment of the present invention. The

prior art correlation discussed above (expressed mathematically as $x(\tau) = \sum_{k=0}^{length-1} r(k)c^*(k-\tau)$) can

be rewritten as: $x(\tau) = \sum_{k=0}^{length-1} r(k+\tau)c^*(k)$. When expressed in such a manner, maintaining

alignment during correlation can be readily performed. As rewritten, the correlations can be performed by receiving a number of chips of the received sequence 605, more than needed for a correlation with a single hypothesis. Then, when provided with a hypothesis (such as hypothesis 610 or 620), the appropriate chips from the received sequence 605 can be selected and correlated with the hypothesis. For example, in Figure 6, because of hypothesis 610's PN offset, a PN sequence generated from the hypothesis 610 can be correlated with chips 0 to K of the received sequence. However, in the case of hypothesis 620, in order to maintain alignment with symbol boundaries, chips 1 to K+1 of the received sequence can be correlated with the PN sequence

generated from the hypothesis 620. This is illustrated in Figure 6 by the alignment of hypotheses 610 and 620 with symbol duration intervals 615 and 625, respectively.

Please amend paragraph [0059] of the specification as follows:

[0059] The searcher control unit 725 can then determine a start condition to begin correlation and coherent accumulation (block 915). The desired start condition may be expressed as when the time index is equal to zero modulo the symbol length. In other words, the desired start condition is when the time index is an integer multiple of the symbol length. For example, if symbol length (N) is a power of 2, then if the time index can be expressed as $t_m t_{m-1} t_{m-2} \dots t_1 t_0$, $t_{m-1}, t_{m-2}, \dots, t_1, t_0$, then $t_{n-1}, t_{n-2}, \dots, t_0$ are all equal to zero (where $n=\log_2 N$). The searcher control unit 725 can also determine a condition to end coherent accumulation (block 920). The desired condition to end the coherent accumulation can be expressed as symbol length-16 modulo symbol length, wherein 16 is the length of the partial correlation. Referring back to the example where the symbol length is a power of 2, then the desired condition to end the coherent accumulation may be when $t_{n-1}, t_{n-2}, \dots, t_0$ are all equal to one (where $n=\log_2 N$). Note that in situations when the symbol length is not a power of 2, combinatorial logic can be used to dictate start and end conditions. The use of combinatorial logic to force start and end conditions is considered to be well understood by those of ordinary skill in the art of the present invention and will not be discussed herein.